

- 13 -

CLAIMS

1. A radiant electric heater (2) characterised by:

5 a base (8) of thermal and electrical insulation material having a surface supporting at least one electric heating element comprising at least one elongate electrically conductive ribbon (10), the at least one electrically conductive ribbon (10) being supported on edge;

10

a rod-like temperature-responsive device (16) extending lengthwise partly across the heater (2) from an edge thereof and over the at least one electric heating element (10);

15

the surface of the base (8) being provided with an elongate recess (22) with sloping sides (24, 26) extending beneath and along the length of the rod-like temperature-responsive device (16), the at least one

20 electrically conductive ribbon (10) being supported in and traversing the elongate recess (22) such that an upper edge (28) of the at least one electrically conductive ribbon (10) substantially follows a contour of the surface of the recess and whereby the upper edge (28)

25 of the at least one electrically conductive ribbon (10) at a region (30) underlying the rod-like temperature-responsive device (16) is provided at a predetermined distance from the rod-like temperature-responsive device (16) and is at a lower level relative to the upper edge

- 14 -

(28) of the at least one electrically conductive ribbon (10) at regions at either side of the elongate recess (22).

5 2. A heater as claimed in claim 1, characterised in that the rod-like temperature-responsive device (16) comprises metal.

3. A heater as claimed in claim 1 or 2, characterised
10 in that the rod-like temperature-responsive device (16) comprises a metal tube.

4. A heater as claimed in any preceding claim,
characterised in that the rod-like temperature-responsive
15 device (16) has a first end supported at an edge region of the heater (2) and a second end (18) substantially unsupported at an inner region of the heater (2).

5. A heater as claimed in any preceding claim,
20 characterised in that the elongate recess (22) has a width which increases with increasing distance from the edge of the heater (2).

6. A heater as claimed in any preceding claim,
25 characterised in that the elongate recess (22) has a depth which increases with increasing distance from the edge of the heater (2).

- 15 -

7. A heater as claimed in claim 6, characterised in that a substantially constant angle of the sloping sides (24, 26) of the elongate recess (22) is maintained as the depth of the elongate recess (22) increases with increasing distance from the edge of the heater (2).

8. A heater as claimed in any preceding claim, characterised in that the elongate recess (22) is of a form selected from substantially shell and scallop form.

9. A heater as claimed in any preceding claim, characterised in that the at least one electrically conductive ribbon (10) is of corrugated form.

10. A heater as claimed in any preceding claim, characterised in that the at least one electrically conductive ribbon (10) is provided with a plurality of spaced-apart legs (12), the legs (12) extending edgewise from the at least one electrically conductive ribbon (10) and being at least partially embedded in the surface of the base (8).

11. A heater as claimed in claim 10, characterised in that the legs (12) are integral with the at least one electrically conductive ribbon (10).

12. A heater as claimed in claim 10, characterised in that the legs (12) are secured to the at least one electrically conductive ribbon (10).

- 16 -

13. A heater as claimed in claim 10, 11 or 12,
characterised in that the legs (12) are partially
embedded in the surface of the base (8) to substantially
the same depth in the elongate recess (22) as elsewhere
5 on the base (8).

14. A heater as claimed in any preceding claim,
characterised in that the base (8) comprises microporous
thermal and electrical insulation material.

10

15. A heater as claimed in any preceding claim,
characterised in that the base (8) is provided in a dish-
like support (6).

15 16. A heater as claimed in claim 15, characterised in
that the dish-like support (6) is of metal.

17. A heater as claimed in any preceding claim,
characterised by being adapted for location beneath a
20 cooking surface (4).

18. A heater as claimed in claim 17, characterised in
that the cooking surface (4) is of glass-ceramic
material.